REMARKS

Claims 1-20 were pending at the time of examination. Claims 7-14 and 20 have been amended. No new matter has been added. The applicant respectfully requests reconsideration based on the foregoing amendments and these remarks.

Objections to the Abstract

The abstract of the disclosure was objected to because it exceeds 150 words. In order to overcome the objections, the Applicant has rewritten the abstract to be in narrative form and to be in the range of 50-150 words, as requested. The Applicant submits that the abstract of the disclosure is thus in non-objectionable form.

Claim Rejections – 35 U.S.C. § 101

Claims 8-20 were rejected under 35 U.S.C § 101 as being directed to non-statutory matter, by being directed towards software, per se. The Applicant has amended claim 8 to recite a computer useable medium including a computer readable program, and respectfully submits that claim 8 as amended is directed to statutory matter. Claims 9-14 depend directly or indirectly from claim 8, and are thus directed to statutory matter for at least he same reasons as claim 8.

Claims 15-20 are claims directed to a system and are written in "means plus function" form, with adequate support in the specification. The Applicant respectfully believes that these claims are directed to statutory matter and that the rejection under 35 U.S.C § 101 of claims 15-20 was made in error by the Examiner, especially since the Examiner does not address these claims in the rejection. Thus it is respectfully submitted that claims 8-20 as amended are directed to statutory subject matter and it is requested that the rejection under 35 U.S.C § 101 be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-20 were rejected under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent No. 5,724,570 to Zeller et al (hereinafter "Zeller"), in view of SQUL-92 Specification section 6.10 (hereinafter "SQL-92"). The Applicant respectfully traverses these rejections.

In general, the Applicant's invention, as defined in claim 1, is directed to cashing a datatype of an SQL template. This allows users to quickly determine the datatype of a SQL expression and perform datatype resolution in constant time, even for a complex tree of SQL expressions.

Zeller, on the other hand, is directed to a "complete SQL subquery elimination process," which his achieved by processing a tree of SQL expressions in a "normalizer" that applies a number of "normalization rules" in order to create a "normalized and syntactically transformed but equivalent tree," which is subsequently optimized and stored on a secondary storage memory hard drive, where it can be accessed, when needed.

Thus, both the Applicant's invention and Zeller are directed to making SQL expression resolution more effective, but they use different, alternative methods. Claim 1 of the Applicant's invention recites:

> "A method for datatype caching of an SQL template with references, comprising:
> converting the SQL template into a converted SQL template with an associated cast function;
> acquiring a datatype of the converted SQL template; and
> storing the datatype of the converted SQL template with the SQL template."

The Examiner alleges that "converting the SQL template into a converted SQL template" is shown in Zeller, col. 7, lines 1-17, relies on SQL-92 to show the cast function, and states that "it would have been obvious to a person of ordinary skill in the art to use the method of Zeller et al with the cast function of SQL-92 because the cast function allows for queries with non-homogenous data types to be operate on without data type errors." The Applicant respectfully disagrees. While it possibly may be argued that the normalization rules of Zeller convert an SQL template into a converted SQL template in the process of eliminating the subqueries from the SQL template, there is no need to use a cast function during this normalization process, as the resulting converted tree in Zeller will be fully resolved and stored on a hard drive for future accesses. That is, there will be no future need for a user to quickly access the datatype of the SQL expression by accessing the datatype in a cache. Using a cast function in combination with Zeller would merely add unnecessary complexity to the techniques described in Zeller, with no added resulting benefit. The Applicant respectfully submits that the Examiner has failed to provide sufficient motivation to combine Zeller and SQL-92. Furthermore, the Examiner needs to show a reasonable expectation of success, which the Examiner has failed to do since he has not shown how the cast function of SQL-92 would be incorporated into Zeller and what the resulting improvements would be.

The combination of the references must also teach or suggest all the claim limitations. Even if it were possible to combine Zeller and SQL-92, the combination still would not teach the

remaining limitations of claim 1, as will now be explained. The second clause of claim 1 specifies "acquiring a datatype of the converted SQL template." Zeller, respectfully, does not disclose acquiring a datatype of the converted SQL template. At best, the cited section of Zeller specifies that one of his normalization rule (NR3) can be used on the condition that a subquery has a Boolean result. This subquery is not equivalent to the converted SQL template recited in claim 1.

The last limitation of claim 1, "storing the datatype of the converted SQL template with the SQL template" is also absent in Zeller. What is stored in Zeller is an optimized version of the normalized tree. No mention is made of storing a datatype for a converted SQL template (or for the optimized version of the normalized tree too, for that matter). For at least these reasons, the rejection of claim 1 is unsupported by the art and should be withdrawn.

Claims 2-7 depend directly or indirectly from claim 1, and are thus not anticipated or rendered obvious for at least the reasons discussed above. It is respectfully requested that the rejection under 35 U.S.C § 103(a) be withdrawn for these claims.

For reasons substantially similar to those set forth above, the applicant respectfully contends that the rejection of the computer program product claims 8-14 and the system claims 15-20 is unsupported by the cited art and should be withdrawn.

Conclusion

The Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
MOLLBORN PATENTS

Fredrik Mollborn
Reg. No. 48,587

2840 Colby Drive
Boulder, CO 80305
(303) 459-4527